

CLAIMS

1. An amino acid sequence comprising the sequence presented as Formula I or a variant, homologue, fragment or derivative thereof.

2. An amino acid sequence comprising the sequence presented as Formula I.

3. A nucleotide sequence encoding the amino acid sequence as defined in claim 1 or claim 2.

4. A nucleotide sequence comprising the sequence presented as SEQ ID No. 2 or SEQ ID No. 4 or SEQ ID No. 6 or a variant, homologue, fragment or derivative thereof.

5. A nucleotide sequence comprising the sequence presented as SEQ ID No. 2 or SEQ ID No. 4 or SED ID No. 6.

6. A nucleotide sequence that is capable of hybridising to the nucleotide sequence according to ~~any one of claims 3 to 5~~.

7. A nucleotide sequence that is capable of hybridising to the nucleotide sequence according to claim 6.

8. A vector comprising the nucleotide sequence according to ~~any one of claims 3 to 7~~.

9. A host cell into which has been incorporated the nucleotide sequence according to any one of claims 3 to 7.

10. An assay method for identifying an agent that can affect PDE_{XIV} activity or expression, the assay method comprising

contacting an agent with an amino acid according to claim 1 or claim 2 or a nucleotide sequence according to any one of claims 3 to 7; and



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15. An enzyme capable of having an immunological reaction with an antibody raised against PDE_{XIV}.

16. A nucleotide sequence coding for a PDE_{XIV} wherein the nucleotide sequence is obtainable from NCIMB 40995 or NCIMB 40996 or NCIMB 41027.

17. A PDE wherein the PDE_{XIV} is expressible from a nucleotide sequence obtainable from NCIMB 40995 or NCIMB 40996 or NCIMB 41027.

18. Use of an agent which has an effect on the activity of PDE_{XIV} or the expression thereof in the preparation of a pharmaceutical composition for the treatment of a disease or condition associated with PDE_{XIV}.

19. Use of a PDE_{XIV} gene and/or expression product thereof in the preparation of a medicament for the treatment and/or modulation of disturbances associated with an imbalance or disturbance of PDE_{XIV}.

20. Use according to claim 19 wherein the PDE_{XIV} and/or expression product thereof is used to screen for agents that can modulate the activity of the PDE_{XIV} and/or expression product thereof.

21. A PDE_{XIV} agonist wherein the PDE_{XIV} is as defined in claim 1 or is the nucleotide sequence coding for same.

22. A PDE_{XIV} antagonist wherein the PDE_{XIV} is as defined in claim 1 or is the nucleotide sequence coding for same.

23. A recombinant PDE_{XIV} enzyme.

24. A recombinant nucleotide sequence encoding a PDE_{XIV} enzyme.

25. A PDE_{XIV} enzyme substantially as described herein.

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